

Television Engineering

SOV/1854

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AVAILABLE: Library of Congress

JP/jmr  
7-23-59

Card 5/5

SHEYFIS, Isaak Iosifovich; VARBANSKIY, A.M., otv. red.; VENGRENYUK,  
L.I., red.; CHURAKOVA, V.A., tekhn. red.

[Improvement of the quality indices of the video channels of  
television stations] Uluchshenie kachestvennykh pokazatelei  
videotrakta televizionnykh tsentrov. Moskva, Sviaz'izdat,  
1963. 71 p. (MIRA 16:8)

(Television)

VARBANSKIY, Aleksandr Mikhaylovich; SAMOYLOV, V.F., retsenzent;  
KRIVOSHEYEV, M.I., red.

[Television technology] Televizionnaia tekhnika. Izd.2.,  
perer. i dop. Moskva, Izd-vo "Energia," 1964. 543 p.  
(MIRA 17:6)

VARBIESCU, E.

RUMANIA/Chemical Technology. Chemical Products and Their  
Application. Catalysts and Sorbents.

H

Abs Jour: Ref Zhur-Khim., No 10, 1959, 35513.

Author : Zapan, M., Opreescu, G., and Varbiescu, E.

Inst :

Title : The Production of Cation-Exchange Resins from Wood  
Shavings (Sulfonated Wood Pulp)

Orig Pub: Celuloza si Hirtie, 6, No 8, 278-288 (1957) (in Ru-  
manian with German, English, French, and Russian  
summaries)

Abstract: The sulfonation of wood shavings at 150o for 7 hrs  
gives cation-exchange resins which are suitable  
for application in water softening installations.  
The capacity of the resins is about 2.5 mc  $\text{Ca}^{2+}$ /

Card : 1/2

ROMANIA/Chemical Technology. Chemical Products and Their  
Application. Catalysts and Sorbents.

H

Abs Jour: Ref Zhur-Khim., No 10, 1959, 35513.

gram. -- From a summary by the authors.

Cardq : 2/2

11-28

VARBIRO, B.;SZAVA, I.;KOCH, S.

Goiter endemic in children in Komlon. *Gyermekegygyaszat* 4 no.10:314-  
316 Oct 1953. (CIML 25:5)

1. Doctor for Varbiro. 2. Komlo Municipal Council Pediatric Dispensary.

VARBIRO, Bela, dr.,; GYIMESINE, Remenyseg, Ilona, dr.

Therapeutic considerations on the epidemic of whooping cough  
during 1953. Orv. hetil. 96 no.7:186-190 13 Feb 55

1. A Komloi Tanacs Rendelointezete (igazgato Laczhegyi Laszlo dr.)  
Gyernekegygyaszatanak (foorvos: Varbiro Bela dr.) koslame nye.  
(WHOOPI NG COUG H, therapy,)

*JH/12/RU, Bela, dr.*  
VONOCZKY, Jozsef, dr.: VARBIRO, Bela, dr.

Energy requirements for infants with different body structures  
based on body surface area. *Gyermekgyógyászat* 8 no.1-2:52-55  
Jan-Feb 57.

1. Pécsi Orvostudományi Egyetem Gyermekklinikájának (igazgató:  
dr. Kerpel-Fronius, Odon egyetemi tanár) és a Baranyamegyei  
Tanács Rendelőintézeté, Pécs (igazgató: dr. Linka, László)  
*Gyermekgyógyászat*ának közleménye.

(INFANT NUTRITION

energy requirements, comparison of calculation methods  
based on body weight & body surface area (Hun))



VARBIRO, Bela, dr.; VONOCZKY, Jozsef, dr.

Simple method for the determination of the energy requirement of infants based on body surface area. *Gyermekgyógyászat* 8 no. 1-2:55-59 Jan-Feb 57.

1. Pécsi Orvostudományi Egyetem Gyermekklinikájának (Igazgató: dr. Kerpel-Fronius, Odon egyetemi tanár) és a Baranyamegyei Tanács Rendelőintézete Pécs (Igazgató: dr. Linka, László) *Gyermekgyógyászatanak közleménye.*

(INFANT NUTRITION

energy requirements, simple method for calculation based on body surface area (Hun))

VARBIRO, Bela, dr.

Simple methods for the determination of some data for continuous drop infusions. Orv. hetil. 103 no.48:2287-2289 2 D '62.

1. Pecs Varosi Tanacs, Rendelointezet.  
(INFUSIONS, PARENTERAL)

HUNGARY

VANBERG, B., Dr: Ambulant Clinic of the City Council of  
Pecs (Pecs Mj. Városi Tanács, Kórházintézet).

"Mathematical Formula for the Determination of the "Ideal"  
Weight of the Infant Related to Its Length."

Budapest, Orvosi Hetilap, Vol 104, No 2, 15 Jan 66, pp 61-  
62.

Abstract: [Author's Hungarian summary] an empirical formula which allows the simple calculation of the "ideal" weight of the infant related to its length is derived. No references are given.

1/1

11

VARBIRO, GY

Past and present organization of Lake Varosiliget. p. 36.  
MELYEPITESTUDOMANYI SZEMLE. (Kozlekedesi Kiado) Budapest. Vol. 6, no. 1, Jan 1956.

SOURCE: EEAL, Vol. 5, no. 7, July 1956.

VARBIRO, GY.

Past and present organization of Lake Varosliget. p. 39  
MELEYEPITFSTUDOMANYI SZEMLE. (Kozlekedesi Kiado) Budapest. Vol 6, no. 1, Jan 1956

SOURCE: EEAL, Vol 5, no. 7, July 1956

VARBIRO, GY.

Water regulation in the valley of the rivulet Rakos near Rakoscsaba.  
p. 110.

(Melyepitestudományi Szemle, Vol. 7, no. 1/3, Jan./Mar. 1957. Budapest,  
Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 9, Sept. 1957. Uncl.

VARBOT, Zh.F., inzh.; SHENSTAKOV, B.I., inzh.

Photoelectron devices for control of street lighting.  
Energetik 8 no.2:3-4 F '60. (MIRA 13:6)  
(Street lighting)

VARBOT, Zh.F.; SHESTAKOV, B.I.

Circuits for the automatic switching-in of reserves at municipal  
street lighting transformer points. Prom. energ. 16 no.4:6-8  
Ap '61. (MIRA 14:9)

(Electric power distribution)  
(Street lighting)



VARECH

CZECH

Geological and petrogenetic relations of the siderite to

pyrite of Marek Vrch near Krasnohorská

pyrite of Marek Vrch near Krasnohorská

2. 211

VARCEK, C.

VARCEK, C. Contribution to the study of metallogenetic conditions  
in the southern portion of the Spis-Gemer ore mountains  
p.58.

Vol. 7, no. 1/2, 1956, GEOLOGICKY SBORNIK, BRATISLAVA, CZECHOSLOVAKIA.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10,  
Oct. 1956.

VARCEK, C.

"Origin and occurrence of albite in siderite veins in the environs of Roznava."

GEOLOGICKE PRACE; ZPRAVI, Bratislava, Czechoslovakia, No. 4, 1955.

Monthly list of EAST EUROPEAN ACCESSIONS INDEX (EEAI), Library of Congress, Vol. 8, No. 8, August, 1959.

Unclassified.

~~STATE~~, VARCEK, Cyril

CZECHOSLOVAKIA/Cosmochemistry - Geochemistry. Hydrochemistry.

D.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 30383

Author : Varcek Cyril

Inst :

Title : Formation and Occurrence of Albite in Siderite Veins in the Vicinity of Roznava.

Orig Pub : Geol. prace Zpravy, 1955, No 4, 86-92

Abst : On the basis of new field observations the author considers that, 1) formation of albite took place not later but prior to that of the main body of siderite, 2) genesis of albite is typically hydrothermal, 3) albite is found not only in the principal Bernardi vein, but also in other veins of the area, and moreover only in those which occur in porphyroids or near them. Thus the inflow of Na to the ore process occurred exclusively from the enclosing rocks.

Card 1/1

~~Czechoslovakia~~ *VARCEK, Cyril*  
Czechoslovakia/ Cosmochemistry. Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11517

Author : Varcek Cyril

Title : Study of the Southern Part of Spissko-Gemerski Ore Mountains

Orig Pub : Prispievok k poznaniu metalogenetickych pomerov v juznej casti Spissko-gemerskeho rudohoria.  
Geol. sbor., 1956, 7, No 1-2, 58-65 (Slovak; Russian and German summaries.)

Abstract : In the district of the town of Rozhnyava occur sedimentary-metamorphic rocks of Cambro-Silurian and Carboniferous Period with bodies of volcanic rocks. Ore veins are encountered here in large number and are divided, by mineralogical composition, in 4 groups: 1) quartzic with sulfides and gold, 2) antimonial, 3) sideritic (quartzic, sulfidic, albitic, magnetitic and baritic) and 4) baritic. It is noted that in porphyroids the veins become albitic due to enrichment of ore-bearing solutions with sodium from the enclosing rocks.

CZECHOSLOVAKIA

VARCEK, Cyril

-  
-  
Bratislava, Geologicky Sbornik, No. 2, 1962, pp 173-174  
"In Memoriam of Academician Anatoliy Georgiyevich  
Betehtin"

VARCHAK, I.

Work of the volunteer economic analysis bureaus at the Volga  
United River Steam-Navigation Enterprise. Rech. transp. 24  
no.6:46 '65. (MIRA 18:8)

1. Zamestitel' nachal'nika finansovogo otdela Volzhskogo  
ob'yedinennogo rechnogo parokhodstva.

L 22462-66 EWT(m)/EWP(w)/EWA(d)/T/EWP(t) IJP(c) JD/EM  
 ACC NR: AP6013576 SOURCE CODE: UR/0032/65/031/009/1133/1135

AUTHOR: Karasev, N. A.; Morozov, V. I.; Varchak, N. M.

ORG: Moscow Institute of Radio Electronics and Mining Electromechanics  
 (Moskovskiy institut radioelektroniki i gornoy elektromekhaniki)

TITLE: Determination of residual stresses with computer calculation of strain gage readings

SOURCE: Zavodskaya laboratoriya, v. 31, no. 9, 1965, 1133-1135

TOPIC TAGS: computer calculation, stress analysis, strain gage, galvanometer, steel, tensile stress, metal hardening

ABSTRACT: A method is described which allows continuous recording of the changing readings of a galvanometer and from them the establishment of values of residual stresses associated with the change in deformation of specimens under strain. It is shown that use of an "Era" computer substantially increases accuracy of the determination and accelerates processing of experimental data when their distribution is sufficiently dense. The plane stressed state of carbonitrided and shot-peened specimens measuring 75 X 20 X 2.5 mm made of 25KhGM steel was investigated.

The changes of the values of the residual stresses, obtained during etching of carbonitrided and quenched specimens are presented. When the carbonitrided layer is 0.9 mm deep in the surface layer the tensile stresses

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49  
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ACC NR: AP6013576

16 /  
recorded are on the order of 20 KG/mm<sup>2</sup>. With steel-shot hardening the tensile stresses change into compressive stresses; when hardened for 1 minute at a shot velocity of 53.5 m/sec their value rose to 40 KG/mm<sup>2</sup>. When the rate was increased to 78.5 m/sec the stresses were increased to 75 KG/mm<sup>2</sup>. Orig. art. has: 2 figures, 6 formulas, and 1 table. [JPRS]

SUB CODE: 11, 20, 13, 09 / SUBM DATE: none / ORIG REF: 003

Card 2/2 BK

ANIKIN, M. M. and VARCHAVER, G. S.

Osnovy Fizioterapii (Fundamental Physiotherapia), 698 p., Medgiz and Moscow, 1950.

CZECHOSLOVAKIA / Cosmochemistry, Geochemistry. Hydro- D  
chemistry.

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70404.

Author : Varchek

Inst : Not given.

Title : A Study on Paramagnetic Relationship in Gemera  
Deposits.

Orig Pub: Geol. prace, SAV, 1957, No 46, 107 - 131.

Abstract: On the basis of experimental data and those found  
in literature as well as data from private com-  
munications, the hydrothermal ore deposits and  
the related Gemera granites were examined. Three  
regions are described, their common paragenesis  
character, source of ore formation and the role  
of the geological environment. The age of the  
ore formation: middle Trias-lower Miocene.

Card 1/1

24:5500

82467  
S/112/60/000/006/014/032

Translation from: Referativnyy zhurnal, Elektrotehnika, 1960, No. 6, p. 249  
# 4.4812

AUTHORS: Kandyba, V. V., Kutsyna, L. M., Varchenko, A. A., Lupashko, Ye. A.

TITLE: A Device for Measuring the Flame Temperature by the Intensity of Spectral Lines

PERIODICAL: Tr. Komis. po pirometrii pri Vses. n.-i. in-te metrol., 1958,  
No. 1, pp. 69-76

TEXT: An installation has been developed at KhGIMIP for measuring the temperature of flames, in particular, the flame of a gas turbine engine with a photoelectric photometer having a high threshold sensitivity thus the intensity of the "D" spectral line of sodium can be measured. To obtain a "saturation" that is the black radiation in the spectral range of 0.1-0.2 Å at temperatures of  $\sim 2,000^\circ\text{K}$ , an addition of sodium to the flame of  $\sim 10^{13}$ - $10^{14}$  sodium atoms per  $1\text{ cm}^3$  to the flame is sufficient. This addition has practically no influence on the behavior of the flame. A concave longfocal diffraction grating is used in the installation. The mean square error of measuring a temperature of  $\sim 2,000^\circ\text{K}$

Card 1/2

82467

S/112/60/000/006/014/032

A Device for Measuring the Flame Temperature by the Intensity of Spectral Lines

is 1%. The Fabri-Pero (Fabrie-Perau?) standard can serve as a basis for a portable device measuring the temperature of a technical flame with a low background level. The optical circuit of the device consists of a condenser, color filter, lens with a stop, cutting out the central part of the interference pattern which enters the cathode of the photomultiplier of the photometer. A new optical system for measuring the flame temperature using a sodium resonance lamp is also proposed. The lamp has a special extension where sodium is placed. By regulating the temperature of the extension, the intensity of the resonant radiation is controlled. The calibrating curve of the lamp can be built either by using the Plank law or experimentally by the calibrated temperature lamp

"IT-3" (LT-3).

M. S. K.

Card 2/2

VARCHENKO, A. I.; AVER'YANOVA, V. N.; SOLOV'YEV, S. L.;

Some Investigations of Seismic Conditions of Tsunami Generation and Improvement  
of Equipment of Tsunami Warning System.

Report submitted for the 13th General Assembly, IUGG (Oceanography) Berkeley,  
California, 19-31 Aug 63.

VARCHENKO, Ivan Petrovich.

Kiev Order of Labor Red Banner Med Inst imeni Bogomol'ts,  
Academic degree of Doctor of Med Sci based on his defense,  
4 June 1954, in the Council of the Khar'kov State Med  
Inst, of his dissertation entitled: "Food Products as a  
Factor in Communicating Basic Geohelminths".

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no 7, 26 Mar 55, Byulleten'  
MVO SSSR, No. 14, July Moscow pp 4-22, Uncl.  
JPRS/NY-429

USSR/Diseases of Farm Animals - Diseases Caused by Viruses  
and Rickettsiae.

R-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, 45411

Author : Varchenko, L.D.

Inst :

Title : Industrial Processes of the Production of the Concentrated  
Adsorbate-Vaccine Against Swine Erysipelas.

Orig Pub : Inform. byul. biol. prom-sti, 1957, No 2, 15-16.

Abstract : No abstract.

Card 1/1



with a number of other related items and information regarding

$\pm 1.0 \times 10^{-10}$   $\text{C}(\text{C}_6\text{H}_5\text{OCS}_2)$   $(5.5 \pm 0.5) \times 10^{-10}$   $\text{C}(\text{C}_6\text{H}_5\text{OCS}_2)$

*VARCHENKO, T.P.*  
PILIPENKO, A.T.; VARCHENKO, T.P.; KUDELYA, Ye.S.; KOSTYSHINA, A.P.

Chemical and analytical properties of xanthogenates. Report  
No. 4: The solubility products of zinc, nickel, iron, and  
cadmium xanthogenates [with summary in English]. Zhur.anal  
khim. 12 no.4:457-461 J1-Ag '57. (MIPA 10:10)

1.Kiyevskiy gosudarstvennyy universitet.  
(Solubility) (Xanthic acids)

BEZRUCHENKO, I.N.; VARCHENKO, V.K.

Switching of transformer winding stages using a resistance. Elek.  
i tepl. tiaga 7 no.6:12-13 Ja '63. (MIRA 16:9)

1. Glavnyy konstruktor Dnepropetrovskogo elektrovostroitel'nogo  
zavoda (for Bezruchenko). 2. Nachal'nik issledovatel'skogo otdela  
spetsial'nogo konstruktorskogo byuro Dnepropetrovskogo  
elektrovostroitel'nogo zavoda (for Varchenko).  
(Electric locomotives)

DATISHOV, S.P., kand. tekhn. nauk, V.I. Kuznetsov, kand. tekhn. nauk,  
SETRUCHENKO, V.B., inzh., VAICHENKO, V.B., inzh.

Principal results of stationary tests of industrial 110 and  
D10M electric locomotives. Short. trad. DIT no.39:120-148  
'63. (MIRA 13:4)

25605

S/197/61/000/006/005/007  
B104/B20124.7600  
15.2640

AUTHOR: Varchenya, S.

TITLE: Experimental study of the temperature dependence of  
thermo-emf and of resistivity of manganese-zinc ferritesPERIODICAL: Akademiya nauk Latviyskoy SSR, Izvestiya, no. 6(167), 1961,  
43 - 49

TEXT:  $T \approx 500^\circ \text{K}$  is assumed for the Curie temperature,  $\Delta(d\alpha/dT)_{T=0} \approx 3 \cdot 10^{-7}$  volts/deg<sup>2</sup> will be obtained for ferrites on the basis of the general theory of the Thomson effect. In addition  $\Delta\alpha \approx 10^{-4}$  volts/deg holds at the Curie point as a correction for ferromagnetism. Since the thermo-emf coefficient  $\alpha$  for ferrites is equal to  $10^{-3}$  volt/deg, a measuring accuracy of up to 1 % will be required to allow determining a deviation of the thermo-emf course from its normal course near the Curie point. After having met with difficulties at the beginning, the author constructed the system shown in Fig. 2 for fastening the specimen, following an advice by L. S. Stil'bans (Termoelektricheskoye okhlazhdeniye (Thermoelectric Cooling), 1956). In this system, heat was prevented from

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25605

S/197/61/000/006/005/007  
B104/B201

Experimental study ...

flowing through the thermocouple. Not even this arrangement, however, allowed determining  $\alpha = f(\Delta T)$  exactly for a small  $\Delta T$ . For  $\Delta T$  smaller than  $10^\circ\text{C}$ , it was not possible to determine a definite course of the curve  $\alpha = f(\Delta T)$ . Therefore, when measuring the relation  $\alpha = f(T)$  the curve  $\alpha = f(\Delta T)$  was constructed at high temperatures for each specimen concerned, and, thereupon, the temperature interval was chosen, in which the measurements were to be carried out in the linear course of  $\alpha = f(\Delta T)$ . To eliminate the effect of layers adsorbed on the surface, the specimens were kept for one hour at a temperature of  $300 - 350^\circ\text{C}$ . Once these sources of error were excluded, the Curie temperature was determined with the aid of a ballistic galvanometer according to the change of induction with a rise of temperature. The chemical composition, the Curie temperature, and the resistivity of the specimens are indicated in the table attached. The temperature dependences of the thermo-emf of the specimens are graphically presented in Fig. 5. n-type conductivity was found in all Mn-Zn ferrites. Deviations from the linear dependence of the thermo-emf were established in the Curie temperature range. Similar conditions were established in determining the temperature dependence of the resistivity of specimens (Fig. 6). The relation  $R = R_0 \exp(\Delta E/kT)$  is

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S/197/61/000/006/005/007  
"B104/B201"

Experimental study ...

given for the resistance variation; several activation energies  $\Delta E$  are noted below and above the Curie point. Ya. G. Dorfman is thanked for his interest, and I. M. Kirko for having made the investigation possible. There are 6 figures, 1 table, and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Institut fiziki AN Latv. SSR  
(Institute of Physics AS Latvyskaya SSR)

SUBMITTED: December 3, 1960

Card 3/7

VARCHENYA, S. A.

"Problem of Skin Effect in Strong Magnetic Fields," Tr. In-ta fiziki AN LatvSSR, No 6, 1953, pp 90-92

Resistance and inductance of a ferromagnetic conductor of stesl-3 of 20mm width was tested in strong magnetic fields. It was found that in a field close to maximum permeability of the material, inaccuracy in computation reaches 10%, while with rising field strength, inaccuracy drops to 2%.

RZhFiz, No 3, 1955



1.1

1.1 KASZEWICZ

VARCHENYA S. I.

Call Nr: AF 1141779

AUTHORS: See Table of Contents

TITLE: Applied Magneto-hydraulic Dynamics; (Prikladnaya  
magnitogidrodinamika (Trudy instituta fiziki, VIII)

PUB.DATA: Izdatel'stvo Akademii nauk Latvyskoy SSR, Riga, 1956,  
131 pp. 800 copies

ORIG. AGENCY: Akademiya nauk Latvyskoy SSR, Institut Fiziki

EDITORS: Editorial Board: Ed.-in-chief, Tyutin, I.A., Candidate  
of Technical Sciences, Kirko, I.M. Candidate of Physical  
and Mathematical Sciences, Vitol, V.G. Candidate of  
Physical and Mathematical Sciences, and Varchenya, S.A.;  
Tech.Ed.: Bokman, R.

PURPOSE: See Table of Contents

Card 1/5

Call Nr: AF 1141779

Applied Magneto-hydraulic Dynamics (Cont.)

COVERAGE: See Table of Contents

TABLE OF CONTENTS: 1. Kirko, I.M. Modeling Magneto-hydrodynamic Phenomena in Liquid Metals. 3-23

There are 11 references, of which 4 are USSR, 2 translations into Russian, and the others are English and Danish.

2. Tyutin, I. A., Yankop, E. K. Electro-magnetic Pumps for Liquid Metals (Brief Review of the Literature on the Status of the Problem. 25-48

There are 45 references, of which 24 are USSR, 19 English, 1 Italian, 1 Dutch.

Card 2/5

Call Nr: AF 1141779

Applied Magneto-hydraulic Dynamics (Cont.)

3. Tyutin, I. A. Introduction to the Theory of Induction Pumps. 49-58

There are 8 references, of which 5 are USSR, 2 American, 1 Danish.

4. Birzvalk, Yu.A., Tyutin, I. A. Speed Distribution and Magneto-hydraulic Pressure Losses in a Rectangular Channel. 59-63

There are 2 references, both USSR.

Card 3/5

Applied Magneto-hydraulic Dynamics (Cont.)

Call Nr AF 1141779

5. Tyutin, I. A., Yankop, E. K. Electromagnetic Processes in Induction Pumps for Liquid Metals. 65-80

There are 4 references, of which 1 is USSR, 3 English.

6. Ul'manis, L.Ya. Boundary Effects in Linear or Induction Pumps. 81-94

There are 5 references, of which 4 are USSR, 1 American.

7. Liyelpeter, Ya.Ya. and Tyutin, I.A. Design Methods for Induction Pumps for Liquid Metals. 95-106

There are 4 references, of which 3 are USSR, 1 American.

Card 4/5

Applied Magneto-hydraulic Dynamics (Cont.)

Call Nr: AF 1141799

8. Yankop, E. K. Single-phase a.c. pumps (Faraday  
a.c. pumps) 107-121

No references are given

9. Krumin', Yu.K. A Conduction Ball Situated in a Traveling  
Magnetic Field. 123-131

There are 4 references, 3 of which are USSR, 1 French.

AVAILABLE: Library of Congress

Card 5/5

*611-1-1*

Prikladnaya Magnitogidrodinamika (Applied Magnetohydrodynamics), Works of the Institute of Physics, Vol 8, edited by I. A. Tyutin, Candidate of Technical Sciences; I. M. Kirko, Candidate of Physicomathematical Sciences; V. G. Vitol, Candidate of Physicomathematical Sciences; and S. A. Varchenya; Riga, Publishing House of the Academy of Sciences Latvian SSR; 1956, 132 pp

*sum 1467*

*VARCHENYA, S.A.*

USSR/Electricity - Semiconductors

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 1373  
 Author : *Varchenya, S.A., Dorfman, Ya.G.*  
 Inst :  
 Title : Thermal Electric Properties of Ferrites Near the Curie Temperature.  
 Orig Pub : Radiotekhn. i elektronika, 1957, 2, No 3, 345-347

G-3

Abstract : The purpose of this work is to clarify the problem whether there exists an anomaly in the thermal electric properties of ferrites near the Curie temperature, similar to that observed in ferromagnetic material. The thermal emf of an annular plate of nickel-zinc ferrite with a resistance of  $2.6 \times 10$  ohm/cm (total resistance 6000 ohms, Curie temperature  $200^\circ \text{C}$ ) was measured by a null method, using a high-resistance potentiometer. The accuracy of the measurement reached  $10^{-4}$  volts at temperatures below  $130^\circ \text{C}$ , and  $2 \times 10^{-7}$  volts at higher temperatures. Thanks to the

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USSR/Electricity - Semiconductors

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 1373

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use of two independent circuits for measuring the resultant thermal emf and for determining the temperature, it was possible to measure simultaneously the two quantities. The relative error in the measurement of  $dE/dT$  amounted to 0.01%. It turned out that anomalies of the Peltier and Thomson effect, which have the same character, the same sign, and the same order of magnitude as in case of ferromagnetic metals, are observed. The results are discussed from the point of view of the electron theory of semiconductors.

Card 2/2



PORFIR'YEV, V.B. [Porfir'iev, V.B.]; GRINBERG, I.V.; PETRIKOVSKAYA, M.E.  
[Petrykivs'ka, M.IE.]; VARCHEVSKIY, I.S. [Varchevs'kyi, I.S.]

Studying the origin of petroleum. Pratsi Inst. geol. kor. kop.  
AN URSR 2r59-68 '60. (MIRA 14: )  
(Petroleum geology)

VARCHUK, MARIYA,

Grapes

New method. Mol. kolkh. No. 2, 1952

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

VARCKE, C.

"An outline of the paragenetic conditions of the Gemer ore deposits."

p. 107. (Cheskt Lid., Vol 10, No. 3, 1958, Prague, Czechslovakia)

GEOGRAPHY & GEOLOGY

Monthly Index of East European Accessions (EEAI) LC, Vol 7, No. 12, Dec 58

VARCL, J.

15  
✓ Classification of diamond dust. Jití Varcl (Inst. Minerals, Turnov, Czech.). *Pokroky praktické min.*, Sborník, konf. Brno 1953, 664-70 (Pub. 1954).—A general discussion. 22 references.  
JW  
1/1

Werner Jacobson

3

9-9

VARCL, Jiri

Seminar on monocrystals in Turnov. Chem prum 14 no.2:100-101  
F\*64

1. Vyzkumny ustav monokrystalu, Turnov.

VARCL, Ladislav, prof., dr.

Academician Antonin Salac; obituary. Vestnik CSAV 70 no.1:122-123  
'61.

VARCL. 2.; CYPRIAN, K.

A flowmeter with remote-control reading. p. 148. (Nova Technika, Vol. 2, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Acquisitions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

CYPRIAN, Karel, inz.; VARCL, Zbynek

Flowmeter with remote-control reading. Nova technika 2 no.5:148-150  
My '62.

1. Vyzkumny ustav organickych synthes, Pardubice-Rybitvi.



VANA, J., inz.; SEKERKA, B.; VARCL, Z.

Measuring the surface temperature of revolving cylinders. Automatizace  
5 no.3:70-72, 79 Mr '62.

1. Vyzkumny ustav organickych syntez, Pardubice-Rybitvi.

S/263/62/000/024/002/002  
E194/E455

AUTHORS: Váňa, J., Sekerka, B., Varcl, Z.  
TITLE: Measurement of the surface temperature of rotating shafts  
PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, Izmeritel'naya tekhnika, no.24, 1962, 30, abstract 32.24.185. (Automatizace, v.5, no.6, 1962, 169-171) (Czech.)

TEXT: The Nauchno-issledovatel'skiy institut organicheskogo sinteza ChSSR (Scientific Research Institute of Organic Synthesis of the Czechoslovak Republic) has developed a device for contactless temperature measurement of the surfaces of rotating shafts. The sensitive element is a platinum wire 0.02 mm diameter, wound on a mica former of 7 x 40 mm, 0.05 mm thick in a dust-proof mount. The wire resistance at 20°C is 750 ohms. Temperature is measured by resistance change as indicated by a Wheatstone bridge, the time constant of the device being no more than 20 seconds. The operating current of 1 mA is from two cells which can supply 15 sensitive elements for six months. The sensitive elements are placed 1 mm from the shaft surface and  
Card 1/2

Measurement of the surface ...

S/263/62/000/C24/002/002  
E194/E455

measure temperatures in the range 20 to 150°. Temperatures can be registered as chart recordings from six points on the shaft and as meter readings from nine. If the distance of the sensitive element from the shaft surface varies by  $\pm 0.5$  mm the error of measurement is  $\pm 5^\circ$  at 114°. The practical accuracy at temperatures up to 200°C is  $\pm 2^\circ$ . The device is calibrated by comparison with a contact pick-up or by the "zero distance" method. ✓

[Abstracter's note: Complete translation.]

Card 2/2

JAVOR TIBOR; VARCO VINCE

Experimental studies on the development of atophan ulcer. Kiserletes  
orvostud. 9 no.3:289-295 July 57.

1. Szegedi Orvostudományi Egyetem I. sz. Belklinika.  
(PEPTIC ULCER, exper.

cinchophen induced, direct observations on develop.  
by intestinal cannule method in dogs (Hun))

VARCOP, L., inz., ScC.

Static control properties of conventional heat exchangers.  
Strojirenstvi 13 no.5:351-364 My '63.

1. Vedecko-vyzkumny ustav, Zavody prumyslove automatizace,  
Praha.

DOLEZAL, R., prof., inz. dr.; VARGOP, L., inz.

"Regular dynamic properties of steam generators" by Schneider,  
Spliethoff. Reviewed by R. Dolezal, L. Vargop. Strojirenstvi  
13 no.7:558-559 JL '63.

VARCOP, L. inz.

"Principles of designing the control of thermal power engineering equipment" by J. Stepan. Reviewed by L. Varcop. Automatizace  
7 no. 3: Supplement: Technicka literatura insert Mr '64.

RUMANIA / Chemical Technology, Chemical Products and Their  
Application, .. Pharmaceuticals. Vitamins. Antibiotics.

H-17

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 16534

Author : Puscaru, E.; Coniver, L.; Varcovici, H.

Inst : Not given

Title : New Issues of Pharmacopoeia

Orig Pub : Farmacia (Romin), 1957, 5, No 1, 76-84

Abstract : Peculiarities of the Japanese pharmacopoeia (VI issue, 1951), addition to the Soviet pharmacopoeia (1952 issue), the British (VIII issue, 1953), the Czechoslovakian (II issue, 1954), the Hungarian (V issue, 1954), the Romanian pharmacopoeia (VII issue, 1956), and also the USA (XV issue, 1955) are analyzed. -- E. Natkhan

Card 1/1



COUNTRY : ROMANIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Pharmaceuticals. Vitamins.\*  
 ABS. JOUR. : REKhim., No. 23 1959, No. 23242  
 AUTHOR : Varcovici, H.  
 INST. : -  
 TITLE : Aerosols Containing Medicinal Preparations  
 ORIG. PUB. : Farmacia (Roman.), 1958, 6, No 4, 295-303  
 ABSTRACT : Reviewed is the technique of introducing  
 medicinal preparations (MP) in the form of  
 aerosols, the proposed apparatus for this pur-  
 pose and properties of individual MP groups  
 from the standpoint of a possibility of their  
 application as aerosols (adrenalin, alkaloids,  
 sulfamides, antibiotics and other groups).  
 Presented is the formulation of individual  
 aerosols, their composition, test methods  
 and storage conditions. MP, employed in the  
 form of aerosols, must satisfy the following  
 \* Antibiotics.  
 CARD: 1/2

H - 59

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83242

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT  
Con'd

: requirements: they must irritate mucus membranes of the respiratory organs, must desorb easily. For liquids the maximum allowable dosage must be contained in 1 ml of the preparations; if aerosol is used as a powder, dosage of the active substance (finely ground and non-hygrosopic) must be greater than 1-3 gr. The bibliography covers 13 references. -- G. Marcus.

CARD: 2/2

Distr: 4E2o(j)

4  
2-77A.T.W.B)(MAY)  
/ Potentiometric method for the study of evolved gaseous HCl during the thermal destruction of poly(vinyl chloride). M. Laj and S. Varda (Slovenská vysoká škola techn., Bratislava, Czech.). *Chem. zvesti* 14, 14-20 (1960).—A potentiometric method for the detn. of cleaved gaseous HCl at the thermal destruction of poly(vinyl chloride) (I) is described. The exactness of the method was checked by kinetic measurements of cleaved HCl from I at various temps. in air, O, and Ar. On the basis of kinetic measurements and calcd. value of the activation energy, it was detd. that the mechanism of HCl cleavage from I is of radical "zipper" (Relaxation) character. Jan Miska—

VARDAT, J., HARANCZY, I.

Cell formation in the yolk globules of the ovaries of the Anodonta.,  
p. 139, (ACTA BIOLOGICA, Budapest, Hungary). Vol. 5, No. 1/2, 1954.

SO: Monthly List of East European Accessions, (SEAL) 10, Vol. 4,  
No. 5, May 1955, Uncl.

VARDANIAN, A. G.

Tatevossian, G. T., and Vardanian, A. G.- The Synthesis of Polycyclic Hydroaromatic Ketones. I. 3-Keto-1, 2, 3, 9, 10, 11-hexahydrophenanthrene" (p. 1532)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1947, Vol. 17, No. 8

VARDANIYA, K.Kh.

Effect of the length of the day on the growth and development of  
peach and feijoa. Agrobiologiya no.6:846-851 N-D '60.

(MIRA 13:12)

1. Sukhumskaya opytnaya stantsiya Vsesoyuznogo nauchno-issledo-  
vatel'skogo instituta rasteniyevodstva.

(Peach) . . . (Feijoa) (Plants, Effect of light on)

VARDANIYA, K.Kh.; VARDANIYA, L.Ya.

Intensified stem and leaf growth in the bay laurel and cinnamon  
in response to photoperiod and gibberellin. Bot. zhurn. 45 no.12:  
1802-1810 D '60. (MIRA 13:12)

1. Sukhumskaya opytnaya stantsiya Vsesoyuznogo instituta rasteni-  
yevodstva.

(Gibberellins)

(Photoperiodism)  
(Cinnamon)

(Laurel)

VARDANIYA, K.Kh., kand.biologicheskikh nauk

Effect of the length of day on the growth and development of Java  
tea. Agrobiologiya no.4:628-629 J1-Ag '62. (MIRA 15:9)

1. Sukhumskaya opytnaya stantsiya Vsesoyuznogo nauchno-issledovatel'skogo instituta rasteniyevodstva.  
(SUKHUMI REGION—JAVA TEA) (PHOTOPERIODISM)



VARDANIYA, K.Kh.

Simultaneous effect of photoperiodism and gibberellic acid on the growth and development of *Orthosiphon stamineus* Benth [with summary in English]. *Fiziol. rast.* 10 no.2:159-165 Mr-Apr '63.  
(MIRA 16:5)

1. Sukhumskaya opytnaya stantsiya Vsesoyuznogo instituta rasteniyevodstva, Sukhumi.  
(Gibberellic acid) (Photoperiodism) (Java tea)

VARDANIYA, K.Kh.

Effect of various photoperiods on the development of sweet potatoes  
(Ipomoea batatas Lam.). Bot. zhur. 50 no.3:405-409 Mr '65. (MIRA 18:5)

1. Sukhumskaya ~~opytnaya~~ stantsiya Vsesoyuznogo instituta raste-  
niyevodstva, Abkhazskaya ASSR, pochtovoye otdeleniya Gul'ripshi.

10

Ca

Sulfuric acid hydrolysis of phenyl(3-chlorocrotyl)acetic acid. G. T. Tatevosyan and A. G. Vardanyan. *Proc. Acad. Sci. Armenian S. S. R.* 4, No. 4, 97-101 (1946). - The  $\text{PhCNa}(\text{CO}_2\text{Et})$ , from 118 g.  $\text{PhCH}(\text{CO}_2\text{Et})$ , 11.5 g. Na, and 130 g. abs. EtOH, and 74 g.  $\text{MeCCl}:\text{CHCl}:\text{Cl}$  refluxed 6 hrs. yielded 76% di-Et phenyl(3-chlorocrotyl)malonate, b<sub>p</sub> 100-5°, d<sub>4</sub><sup>20</sup> 1.1322, n<sub>D</sub><sup>20</sup> 1.5100. From 106.5 g. of the ester refluxed with 42 g. NaOH and 800 cc. EtOH 4 hrs., treated with 150 cc. water, then distd. to remove the bulk of the EtOH, and acidified with HCl, there was obtained 91.45% phenyl(3-chlorocrotyl)acetic acid, as a viscous green oil, d<sub>4</sub><sup>20</sup> 1.1721, n<sub>D</sub><sup>20</sup> 1.5412, b<sub>p</sub> 162-5°, which crystd. on long standing, m. 35-6°. This (11 g.) was treated with stirring and cooling with 60 cc. 85%  $\text{H}_2\text{SO}_4$ ; when the reaction subsided, the mixt. was allowed to stand overnight, then treated with ice-water and extd. with  $\text{Et}_2\text{O}$ ; removal of the  $\text{Et}_2\text{O}$  and rubbing of the residue with benzene gave 46.7%  $\alpha$ -phenyl- $\gamma$ -acetylbutyric acid, m. 35-6° (from benzene); semicarbazone, m. 180° (from EtOH). This result indicates that the presence of the carboxylic acid group in the  $\alpha$ -position of the side chain hinders the normally expected cyclization during the  $\text{H}_2\text{SO}_4$  treatment; the expected product was 1-methyl-3,4-dihydro-4-naphthoic acid. G. M. K

ASR-SLA METALLURGICAL LITERATURE CLASSIFICATION

1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

**Polycyclic hydroaromatic ketones. II. 3-Keto-7-methyl-1,2,3,9,10,10a-hexahydrophenanthrene.** G. T. Tatevosyan and A. G. Vardanyan. *Zhur. Obshch. Khim.* (J. Gen. Chem.) 19, 327 (1949); cf. C.A. 41, 432a. 3-MeC<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>OH (107.5 g.), 342 g. 48% HBr, and 100 g. H<sub>2</sub>SO<sub>4</sub> boiled 3.5 hrs. gave 76.3% 3-MeC<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>Br, b. 88-90°. This (120 g.) was added to NaCH<sub>3</sub>(CO<sub>2</sub>Et) (from 145 g. malonic ester) in 280 ml. EtOH, let stand 0.5 hr., refluxed 3 hrs., let stand overnight, and acidified with HCl after concn., to yield 85% 3-MeC<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Et, b. 150-2°, d<sub>4</sub> 1.0544, n<sub>D</sub> 1.4981. This (120 g.) treated with 11 g. Na in 200 ml. EtOH, followed by addn. with cooling of 65 g. CCl<sub>4</sub>, CH<sub>3</sub>CClMe and refluxing 5 hrs., gave after concn. and acidification 95% (3-MeC<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>MeCCl:CHCH<sub>2</sub>CO<sub>2</sub>Et), b. 191-4°, d<sub>4</sub> 1.0974, n<sub>D</sub> 1.5000. This (90 g.) refluxed 2 hrs. with 30 g. NaOH and 110 ml. EtOH, treated with 200 ml. H<sub>2</sub>O, cooled, and acidified with 130 g. HCl gave 76% of the free acid, m. 155-6° (from H<sub>2</sub>O). Heating in a Claisen flask gave 94% (3-MeC<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>MeCCl:CHCH<sub>2</sub>CO<sub>2</sub>H, b. 193-6°. This (21 g.) treated with ice cooling with 115 ml. H<sub>2</sub>SO<sub>4</sub> (d. 1.8), let stand 0.5 hr., and heated 5 hrs. to 70-5°, gave, after ice treatment and washing with alkali 60.9% 3-keto-7-methyl-1,2,3,9,10,10a-hexahydrophenanthrene, m. 95-6° (from EtOH); semicarbazone, m. 221-2° (from benzene); oxime, m. 161-2° (from EtOH). The ketone (5.97 g.) heated 3.5 hrs. with 4.5 g. Se at 290-320° (finally 350°), then

boiled 20 min. with 10% NaOH, and the mixed part allowed to crystallize, gave 0.50 g. 2-methylphenanthrene, m. 54-5° (pure, m. 117-18°), while the alk. soln., after extr. with benzene and acidification with HCl, gave 2.73 g. 3-hydroxy-7-methylphenanthrene, b. 200-1°, m. 146-7° (from EtOH); pure, m. 151-5° (decompu.); heating with Zn dust to red heat gave 2-methylphenanthrene. III. 3-Keto-1,2,3,11,12,12a-hexahydrochrysone. *Ibid.* 332-6. Reduction of 1-C<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CO<sub>2</sub>Et with Na-EtOH gave 64% tetrahydro-1-naphthalenethiol, b. 157-8.5°, d<sub>4</sub> 1.0610, n<sub>D</sub> 1.5033. This (6.42 g.) and 5.70 g. Se heated to 300-20° 5 hrs. gave 2.15 g. of a hydrocarbon, b. 250-5° (pure, m. 98-9), which was apparently 1-EtC<sub>10</sub>H<sub>7</sub>; the use of S instead of Se, 4 hrs. at 190-90° (finally 210-15°), gave 66% 1-C<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>OH, b. 152-4°; this with NaCH<sub>3</sub>(CO<sub>2</sub>Et) gave 1-C<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Et, b. 213-15°, which on treatment with Na in EtOH followed by CCl<sub>4</sub>CH<sub>3</sub>CClMe as described above (preceding part) gave 88% (1-C<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>MeCCl:CHCH<sub>2</sub>CO<sub>2</sub>Et), b. 213-4°, d<sub>4</sub> 1.1288, n<sub>D</sub> 1.5280. Refluxing 65 g. of this with 10 g. NaOH in 200 ml. EtOH gave 55.95% free acid, m. 168-5-9° (from C<sub>10</sub>H<sub>7</sub>Me<sub>2</sub>CO), which on heating with a free flame gave 1-C<sub>10</sub>H<sub>7</sub>CH<sub>2</sub>CH<sub>2</sub>MeCCl:CHCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H, m. 207-7° (from EtOH). This (9 g.) and 180 g. H<sub>2</sub>SO<sub>4</sub> warmed 1.5 hrs. to 60-5° gave, after standing overnight and treatment with ice, 78.6% 3-keto-1,2,3,11,12,12a-hexahydrochrysone, m. 187-7.5° (from C<sub>10</sub>H<sub>7</sub>EtOH); oxime, m. 216° (from C<sub>10</sub>H<sub>7</sub>EtOH). G. M. Kosolapoff

CA

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The synthesis of polycyclic hydroaromatic ketones. IV.  
3-Keto-6-methyl-1,2,3,9,10,10a-hexahydrophenanthrene.  
G. T. Tatevosyan and A. G. Vardanyan. *J. Gen. Chem.*  
*USSR* 21, 1277 (1951) (Rngl. translation). See C. I.  
40, 2366. V. 3-Keto-7-methoxy-1,2,3,11,12,12a-hexa-  
hydrochrysenes. *Ibid.* 1349-55. See C. I. 40, 2367a.  
B. R.

| SYNTHESIS AND PROPERTIES   |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |
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| <p>Synthesis of polycyclic hydroaromatic ketones. I. 3-Keto-1,2,3,9,10,11-hexahydrophenanthrene. G. T. Tatevosyan and A. G. Yerdanyan. <i>Proc. Acad. Sci. Armenian S.S.R.</i> 4, No. 3, 71-6 (1948).—The <math>\text{PhCH}_2\text{CH}_2\text{CNa}(\text{CO}_2\text{Et})_2</math> from 44.2 g. <math>\text{PhCH}_2\text{CH}_2\text{CH}(\text{CO}_2\text{Et})_2</math> in 85 cc. EtOH and 20 g. <math>\text{MeCCl}_2\text{CHCH}_2\text{Cl}</math> refluxed 3.5 hrs. yield 70.24% di-Et phenethyl(3-chlorocrotyl)malonate, <math>b_p</math> 202-7° (on redistn. <math>b_{\text{lit.}}</math> 205-7°, <math>d_4^{20}</math> 1.1137, <math>n_D^{20}</math> 1.5030). This (44.4 g.) refluxed 2.5 hrs. with 15 g. NaOH and 220 cc. aq. EtOH gave 80% <math>\beta</math>-phenethyl(3-chlorocrotyl)malonic acid, m. 104-6° (from dil. EtOH). On heating this gave 95% <math>\alpha</math>-(3-chlorocrotyl)-<math>\gamma</math>-phenylbutyric acid, <math>b_p</math> 203-4°, <math>d_4^{20}</math> 1.1290, <math>n_D^{20}</math> 1.5205. Treatment of this in the cold with 10 vols. <math>\text{H}_2\text{SO}_4</math> (d. 1.80) followed by gradual heating to 60-70° in a N atm. for 2.5 hrs., gave 74.9% 3-keto-1,2,3,9,10,11-hexahydrophenanthrene, m. 80° (from aq. EtOH). G. M. Kowalskoff</p> |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>  |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |
| <table border="1"> <thead> <tr> <th colspan="13">SYNTHESIS</th> <th colspan="13">PROPERTIES</th> </tr> <tr> <th colspan="13">SYNTHESIS</th> <th colspan="13">PROPERTIES</th> </tr> </thead> <tbody> <tr> <td colspan="13">SYNTHESIS</td> <td colspan="13">PROPERTIES</td> </tr> </tbody> </table>  |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  | SYNTHESIS |  |  |  |  |  |  |  |  |  |  |  |  | PROPERTIES |  |  |  |  |  |  |  |  |  |  |  |  | SYNTHESIS |  |  |  |  |  |  |  |  |  |  |  |  | PROPERTIES |  |  |  |  |  |  |  |  |  |  |  |  | SYNTHESIS |  |  |  |  |  |  |  |  |  |  |  |  | PROPERTIES |  |  |  |  |  |  |  |  |  |  |  |  |
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| SYNTHESIS  |  |  |  |  |  |  |  |  |  |  |  |  | PROPERTIES |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |           |  |  |  |  |  |  |  |  |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |

VARDANYAN, A. G.

"Synthesis of polycyclic hydroaromatic ketones. IV. 3-Keto-6-methyl-1,2,3,8,10,11,-hexahydrophenanthrene." G. T. Tatevosyan and A. G. Vardanyan. (p. 1170)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1951, Vol 21, No 6.

TATEVOSYAN, G.T.; ZAGORETS, P.A.; VARDANYAN, A.G.

Synthesis of polycyclic hydroaromatic ketones. Part 7. 6- and 7-methoxy-3-keto-1,2,3,9,10,10a-hexahydrophenanthrenes. *Dokl. Akad. Nauk SSSR* no. 6:941-949 Je '53. (MLRA 6:6)

1. Khimicheskiy institut Akademii nauk Armyanskoy SSR. (Ketones)



✓ Synthesis of polynuclear ketones IV 2-Oxo-2,4,4-  
4a,6,7-hexahydro-5H-dibenzo[1,2-b:4,5-b']dipyrro-5-one, 10  
Intervyan, A. G. *Tetrahedron* 1996, 52, 10001-10008  
Valdanyan, T. Gen. Chem. USSR 25 1719-1720 (1950)  
(Engl. translation) Dec 1, 1950, 1997. H M R

Synthesis of polynuclear ketones. IX. 2-Oxo-2,3,4,4a,6,7-hexahydro-5H-dibenzo[a,c]cycloheptatriene. G. T. Tatevyan, A. G. Terzyan, S. A. Vardanyan and A. G. Vardanyan, Zhur. Obshchei Khim. 25, 1794-7 (1951). C.A. 44, 8345c, 49, 13197. Di-Et malonate and Ph(CH<sub>2</sub>)<sub>2</sub>CH<sub>2</sub>Br gave Ph(CH<sub>2</sub>)<sub>2</sub>CH(CO<sub>2</sub>Et)<sub>2</sub> (I), b<sub>p</sub> 170-3°, d<sub>4</sub> 1.0546, n<sub>D</sub><sup>20</sup> 1.4901. I (120 g.) converted to Na deriv. with 10 g. Na in 160 ml. EtOH, was treated with 65 g. MeCCl<sub>2</sub>-CHCH<sub>2</sub>Cl and the mixt. refluxed 6 hrs., yielded 83.50% Ph(CH<sub>2</sub>)<sub>2</sub>CH(CO<sub>2</sub>Et)<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CClMe (II), b<sub>p</sub> 194-200°, d<sub>4</sub> 1.0970, n<sub>D</sub><sup>20</sup> 1.5038. II (131 g.) refluxed 4 hrs. with 43 g. NaOH in 650 ml. 90% EtOH and acidified, gave 72% Ph(CH<sub>2</sub>)<sub>2</sub>CH(CO<sub>2</sub>H)<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CClMe, m 124-5°, which heated gave Ph(CH<sub>2</sub>)<sub>2</sub>CH(CO<sub>2</sub>H)<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CClMe (III), b<sub>p</sub> 190-5°, n<sub>D</sub><sup>20</sup> 1.5298, supercooled. III treated with H<sub>2</sub>SO<sub>4</sub> (d. 1.78) at 60° under CO<sub>2</sub> gave no ketonic material, at room temp. the results were also neg., both the H<sub>2</sub>SO<sub>4</sub> and the polyphosphoric acid methods being unsatisfactory for ring closure. III (9 g.) was treated with 7.1 g. I Cl<sub>2</sub> in dry C<sub>6</sub>H<sub>6</sub> and the product treated with 40 g. SnCl<sub>4</sub> in 150 ml

C<sub>6</sub>H<sub>6</sub> and refluxed 6 hrs. After washing with HCl and NaOH, there was obtained 3.4 g. neutral product, identical as crude 2-oxo-2,3,4,4a,6,7-hexahydro-5H-dibenzo[a,c]cycloheptatriene (IV). IV (10 g.) treated with 10 g. MeOH and kept 2 days at 10° gave after treatment with ice, and washing with NaOH, 0.83 g. 2-oxo-2,3,4,4a,6,7-hexahydro-5H-dibenzo[a,c]cycloheptatriene (V), m. 100-1° (from Et<sub>2</sub>O); 2,4-dinitrophenylhydrazones, orange-red, m. 183-5°. To 5.7 g. Na in 110 ml. dry MeOH was added 60 ml. dry C<sub>6</sub>H<sub>6</sub> and 10.8 g. 3-carbomethoxybenzoinerone; after refluxing 0.5 hr. the mixt. was cooled, treated with 33.5 ml. MeCCl<sub>2</sub>-CHCH<sub>2</sub>Cl and refluxed 0.5 hr. to yield 15 g. 2-(γ-chlorocrotyl)-3-carbomethoxybenzoinerone, which hydrolyzed by refluxing 2 hrs. with 20.5 g. NaOH in 45 ml. H<sub>2</sub>O and 185 ml. MeOH, gave IV, a dark oil, in 98.5% yield. IV cyclized with H<sub>2</sub>SO<sub>4</sub> as above at room temp. yielding 50.3% V, m. 100-1°. G. M. Kosolapoff.

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VARDANIAN, A. G.

"Synthesis of polycyclic hydroaromatic ketones: III. 3-keto-1, 2, 3, 11, 12, 12a-hexahydrochrysene". Tamevosian, G. T. and Vardanian, A. G. (p. 332)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1949, Vol 19, No 2.

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VARDANYAN, A. G.

USSR/Chemistry - Hydroaromatic ketones

Card 1/1 Pub. 151 - 26/37

Authors : Tatevosyan, G. T., and Vardanyan, A. G.

Title : Synthesis of polynuclear hydroaromatic ketones. Part 8.- 8-methyl- and 8-methoxy-3-keto-1,2,3,9,10,10a-hexahydrophenanthrenes

Periodical : Zhur. ob. khim. 24/10, 1845-1851, Oct 1954

Abstract : The effect of methyl and methoxyl groups oriented in ortho-position of the aromatic nucleus on the reaction of sulfuric acid hydrolysis and double cyclization of alpha-(3-chlorocrotyl)-gamma-phenyl butyric acids was investigated. The investigated conversion process was found to be not much affected by the methyl group and the yield of the conversion product is of the same order as the non-substituted ketone and its other methyl homologues. The presence of the methoxyl group in meta-position was found to be a deterrent in the conversion process. Six references: 3-USSR; 2-German and 1-USA (1923-1953).

Institution : Academy of Sciences Arm-SSR, Chemical Institute

Submitted : May 18, 1954

TATEVOSYAN, G.T.; TERZIAN, A.G.; VARDANYAN, S.A.; VARDANYAN, A.G.

Synthesis of polynuclear ketones. Part 9. 2-keto-2,3,4,4a,6,7-hexahydro-5 -dibenzo[a,c]cycloheptatriene. Zhur.ob.khim. 25 no.9:1766-1771 S '55. (MIRA 9:2)

1. Khimicheskiy institut Akademii nauk Armyanskoy SSR.  
(Dibenzocycloheptatriene)

-- VARDANYAN, A. A.

"Ketone Synthesis of the Phenanthrene Series With the Aid of Sulfuric Acid Hydrolysis and Double Cyclization of Alpha - (3-chlorocrotyl)-gamma-phenylbutyric Acids." Cand Chem Sci, Chemistry Inst, Acad Sci Armenian SSR, Yerevan, 1954. (IzKhim, No 5, Mar 55)

So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)



YESAYAN, G.T.; VARDANYAN, A.G.

Synthesis of new analogues of pseudoallicin. Dokl. AN Arm. SSR 23  
no.4:169-173 '56. (MIRA 10:1)

1. Khimicheskiy institut Akademii nauk Armyanskey SSR. Predstavlene  
V.Isagulyantsem.

(Allicin)

VARDANYAN, A.G.  
YESAYAN, G.T.; VARDANYAN, A.G.

The reaction of  $\gamma$ -chlorocrotylsulfochloride with certain amines substituted in the nucleus. Izv. AN Arm. SSR. Ser. khim. nauk 10 no.1:71-74 '57. (MLBA 10:9)

1. Khimicheskiy institut Akademii nauk Armyanskoy SSR.  
(Chemical reaction--Mechanism)  
(Chlorides) (Amines)

YESAYAN, G.T.; VARDANYAN, A.G.

Sulfonic acid esters. Report No.2: Synthesis of 4 - methyl -7- cumaryl  
sulfonic acid esters. Izv. AN Arm. SSR. Ser. khim. nauk v.10 no.5:  
353-356 '57. (MIRA 11:1)

1. Khimicheskiy institut AN ArmSSR.  
(Sulfonic acids)

YESAYAN, G.T.; VARDANYAN, A.G.

Sulfonic acid esters. Report No.3: Cleaving sulfonic acid esters  
by thiocyanat. Izv.AN Arm.SSR. Khim.nauki 11 no.2:119-125  
'58. (MIRA 11:11)

1. Institut organicheskoy khimii AN ArmSSR.  
(Sulfonic acids) (Thiocyanates)

36063  
S/079/62/032/004/004/010  
D204/D301

15.8130  
AUTHORS:

Vardanyan, S.A., Vardanyan, A.G., and Khrlakyan, S.P.

TITLE:

Synthesis of 2,5-diaryl furans and their scintillating properties

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 4, 1962, 1195-1196

TEXT: The so far unknown 2,5-di-p-xylyl-, 2,5-di-o-xylyl- and 2,5-di(p-phenoxyphenyl)- furans (A, B and C) were prepared by modification of the method of Lutz et al., to investigate the effect of structure on their scintillation properties. Compounds A, B, C were respectively obtained from 1,4-di-p-xylyl-, 1,4-di-o-xylyl- and 1,4-di(p-phenoxyphenyl)-1,4-diketobutene-2, whose preparation is described for the first time, by boiling the diketones in glacial acetic acid in the presence of  $\text{SnCl}_2 \cdot 2\text{H}_2\text{O}$  and conc. HCl for 5 hours.

The reaction mixtures were then cooled and the crystalline products were filtered, washed with water and recrystallized. M.p's and yields of the starting diketones and the corresponding 2,5-diaryl furans are tabulated. The scintillating properties proved to be clo-

Card 1/2

Synthesis of 2,5-diaryl furans ...

S/079/62/032/004/004/010  
D204/D301

se to those of p-terphenyl. There are 1 table and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: R.E. Lutz and R.J. Rowlett, J. Am. Chem. Soc., 70, 1359, 1948.

ASSOCIATION: Fizicheskiy institut Akademii nauk Armyanskoy SSR,  
(Physics Institute of the Academy of Sciences of the  
Armenian SSR)

SUBMITTED: May 8, 1961

Card 2/2

VARDANYAN, S.A.; VARDANYAN, A.G.

Synthesis of 4-methoxy-p-terphenyl. Izv. AN Arm.SSR.Khim.nauki 17  
no.4:425-430 '64. (MIRA 18:6)

VARDANYAN, A.S.

Some data on the permeability of capillaries in patients with  
chronic tonsillitis. Zhur. eksp. i klin. med. 3 no. 6:53-57  
'63 (MIRA 17:4)

1. Kafedra bolezney ukha, gorla i nosa Yerevanskogo meditsin-  
skogo instituta.



*VAR D A N Y A S V*

86-11-18/31

**AUTHORS:** Nadtoka, V.A., Engr Maj, Vardanyan, B.V., Engr Maj

**TITLE:** Icing of Jet Engines and How to Prevent it (Obledeneniye reaktivnykh dvigateley i bor'ba s nim)

**PERIODICAL:** Vestnik Vozdushnogo Flota, 1957, Nr 11, pp. 65-67 (USSR)

**ABSTRACT:** This is a discussion apparently reflecting current Soviet fighter aircraft practice. The aircraft engine elements which may be affected by icing are given, and the possible resulting impairment or damages are mentioned. The most pronounced icing occurs at minus temperatures ranging from 8 to 12°C; it diminishes with increasing flying speeds. The electric de-icing system heats the grills of the engine air inlets, and a few other elements of the engine; the system does so for not more than 13 minutes, at the indicated speed not exceeding 500 km/hr. The other elements are prevented from icing at any flying speed and irrespective of the length of time of cloud flying. An aircraft flying at not more than 500 km/hr must not remain under icing conditions for more than a short period; it may remain considerably longer when flying at 600 km/hr or faster. At speeds exceeding 600 km/hr, and at more than 5,000 m altitudes, it may fly in clouds practically any length of time without developing icing. In order to avoid icing hazards at lower altitudes, the flying speeds must be increased. At ground level the flying speed must be 700-750 km/hr.

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86-11-18/31

## Icing of Jet Engines and How to Prevent it (cont)

The maximum period (13-minutes), during which the aircraft may fly safely under icing conditions, is enough to pierce the overcast when the icing begins at the 8,000 m altitude and the landing approach is made at the indicated speeds of 450-500 km/hr. The effectiveness of the engine de-icing system increases when the water content is maximal and temperature of the outside air is between minus 12°C and minus 8°C, and when the water content is lower at any outside temperature. In order to ensure that the engine de-icing system prevents icing, the weather forecast is consulted before taking off and, if it indicates the possibility of icing, the engine de-icing system is turned on immediately before takeoff, and turned off after leaving the icing area or landing. The engine de-icing system requires very careful inspection and careful maintenance. When there is a possibility of icing, the aircraft should be flown preferably at the indicated speed exceeding 600 km/hr, and the speed should be increased (by descending to lower altitudes or increasing the revolutions) upon the temperature rise of the gases behind the turbine, indicative of a considerable icing of the air intake grills taking place. If this temperature rises up to 520°C at 10,400 rpm or less, or up to 550°C at minimum rpm, or up to 610°C at maximum rpm, which temperatures are the maximum ones permitted at these rpms, then it is

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Icing of Jet Engines and How to Prevent it (cont)

recommended that the icing area should be left. If, after flying in the icing-subjected area, a temperature rise behind the turbine was noticed, then the compressor blades are specially examined during the post-flight inspection. Four photographic illustrations.

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Card 3/3

light pulse measurement, bolometer